



PATENT  
Attorney Docket No. 16131US02

(FW)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

) Van Rooyen, et al.

) Serial No. 10/645,349

) Filed: August 21, 2003

) For: ANTENNA ARRAY INCLUDING  
VIRTUAL ANTENNA ELEMENTS

) Examiner: Mull, Fred H

) Group Art Unit: 3662

) Conformation No.: 6747

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is  
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envelope addressed to: Mail Stop  
Amendment, Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-  
1450 on 21-Dec-05

By:

Ognyan I. Beremski  
Reg. No. 51,458

**TRANSMITTAL OF SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENT  
AFTER APPLICATION FILING DATE**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**ENCLOSURES**

Enclosed are the following:

- \* A completed PTO/SB/08A which has one (1) page, with a copy of same.
- \* A copy of each printed or patented reference listed in the enclosed form PTO/SB/08A and not previously provided to or by the PTO in this application. Two (2) documents are enclosed.
- \* A copy of the European Search Report for the European application, No. 03793385.0 corresponding to the above application.

**FEE DETERMINATION**

- \* A fee is believed to be due.

- \* In compliance with 37 C.F.R. § 1.97(c)(2), Applicants respectfully submit the fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00.

## **FEE PAYMENT**

The following arrangements have been made to pay the fees calculated above:

- \* The Commissioner is hereby authorized to charge the \$180.00 fee which is required to Deposit Account No. 13-0017, in the name of McAndrews, Held & Malloy.

## **REQUEST FOR CONSIDERATION**

\* This paper and enclosures are believed to be entitled to consideration under 37 C.F.R. § 1.97, based on the facts stated above.

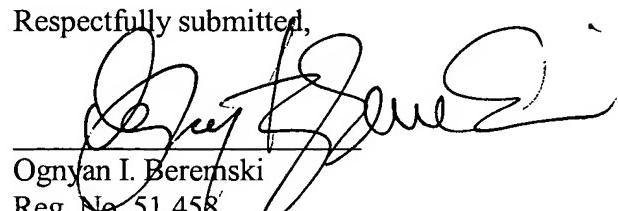
\* This submission is in no way intended as an admission that the cited references constitute prior art under any subsection of 35 U.S.C. § 102 or §103. Applicant expressly retains the right to argue that any of the cited references are not indeed prior art or to take any actions necessary to remove any of the cited references from the available prior art.

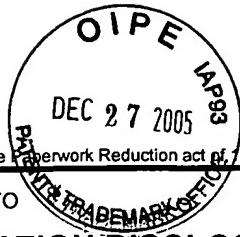
\* The Examiner is requested to initial both copies of the enclosed PTO/SB/08A and return one copy to the Applicants to indicate consideration of the enclosed references.

Respectfully submitted,

Dated: 21-Dec-05

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

<b>Complete if Known</b>	
<b>Application Number</b>	10/645,349
<b>Filing Date</b>	8-21-2003
<b>First Named Inventor</b>	Van Rooyen et al
<b>Group Art Unit</b>	3662
<b>Examiner Name</b>	Mull, Fred H.
<b>Attorney Docket Number</b>	16131US02

**U.S. PATENT DOCUMENTS**

Examiner Initial*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
A1	US-5,537,367 A	07-16-1996	Lockwood et al		
A2					
A3					
A4					
A5					
A6					
A7					
A8					
A9					
A10					
A11					
A12					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
A13						
A14						
A15						
A16						
A17						

**OTHER ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	A18	CHAE-HYUN L ET AL, "Channel Capacity Enhancement using Virtual Array Elements in Smart Antenna Systems", ICC 2002, 2002 IEEE International Conference on Communications, Nw York, NY, April 28-May2, 2002, IEEE International Conference on Communications, NY, vol. 1 of 5, pp 155-159, XP010589477, ISBN: 0-7803-7400-2.
	A19	
	A20	

EXAMINER SIGNATURE	DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450 Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. Send TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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